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METHOD AND APPARATUS FOR PROVIDING UPDATED SYSTEM LOCALITY INFORMATION DURING RUNTIME

ABSTRACT

Embodiments of the invention provide a method and an apparatus to collect and dynamically update system locality information during runtime. In one method embodiment, the present invention collects system locality information at boot time to be provided to an operating system. The system locality information describes distances between devices within an integrated processing system. The operating system is then notified that a triggering event has occurred that may potentially alter the distances between devices within the integrated processing system. Upon receipt of this notification, the operating system invokes an Advanced Configuration and Power Interface (ACPI) procedure that provides updated system locality information during runtime to reflect the changes in distances between devices within the integrated processor system after the occurrence of the triggering event.